

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A resolver ~~comprising~~ comprising:
~~_____ a rotor, a rotor;~~
~~_____ a stator, a stator;~~
~~_____ an excitation winding and an output winding, winding;~~
~~_____ a first output winding for outputting an X direction component of the rotor;~~
and
~~_____ a second output winding for outputting a Y direction component of the rotor,~~
~~characterized in that wherein~~ an output terminal is provided at a middle point between
opposite end terminals of each of the output ~~winding~~ windings.

2. (Currently Amended) A resolver ~~comprising~~ comprising:
~~_____ a rotor, a rotor;~~
~~_____ a stator, a stator;~~
~~_____ an excitation winding and an output winding, winding;~~
~~_____ a first output winding for outputting an X direction component of the rotor;~~
and
~~_____ a second output winding for outputting a Y direction component of the rotor,~~
~~_____ the excitation winding and the first or second output winding being wound~~
around ~~the an~~ identical pole of the stator,
~~_____ characterized in that wherein~~ an output terminal is provided at a middle point
between opposite end terminals of each of the output ~~winding~~ windings.

3. (Currently Amended) A resolver fault detection circuit to be used for a
resolver, ~~comprising~~ comprising:

~~_____ a rotor, a rotor;~~

~~_____ a stator, a stator;~~

~~_____ an excitation winding and an output winding, winding;~~

~~_____ a first output winding for outputting an X direction component of the rotor;~~

~~and~~

~~_____ a second output winding for outputting a Y direction component of the rotor,~~

~~characterized in that wherein the circuit comprises:~~

~~an output terminal provided at a middle point between opposite end terminals
of each of the output winding, windings;~~

~~a difference voltage detection circuit for obtaining a difference voltage
between a first output voltage, between one of the opposite end terminals of the first or
second output winding of the resolver and the middle point, and a second output voltage,
between the other one of the opposite end terminals of the output winding and the middle
point; and~~

~~a comparator circuit for outputting a signal as a fault signal when an output
voltage from the difference voltage detection circuit deviates from a reference value.~~

4. (Withdrawn) A resolver fault detection method to be used for a resolver comprising a rotor, a stator, an excitation winding and an output winding, characterized in that the method comprises the step of obtaining a fault detection signal from a resolver fault detection circuit to detect that the resolver is faulty, wherein the resolver fault detection circuit comprises:

an output terminal provided at a middle point between opposite end terminals of the output winding;

a difference voltage detection circuit for obtaining a difference voltage between a first output voltage, between one of the opposite end terminals of the output

winding of the resolver and the middle point, and a second output voltage, between the other one of the opposite end terminals of the output winding and the middle point; and

a comparator circuit for outputting a signal as a fault signal when an output voltage from the difference voltage detection circuit deviates from a reference value.

5. (Withdrawn) A resolver fault detection method, characterized in that the method comprises the steps of:

obtaining a first signal of a resolver fault detection circuit, the first signal indicating a fault of a first output winding for outputting an X direction component of a rotor;

obtaining a second signal of the resolver fault detection circuit, the second signal indicating a fault of a second output winding for outputting a Y direction component of the rotor; and

obtaining a logical sum of the first signal and the second signal as a fault detection signal.

6. (Currently Amended) The resolver of claim 1, wherein the excitation winding and the output winding being wound around ~~the~~an identical pole of the stator.

7. (Currently Amended) The resolver of claim 1, further comprising a resolver fault detection circuit, wherein the resolver fault detection circuit comprises:

a difference voltage detection circuit for obtaining a difference voltage between a first output voltage, between one of the opposite end terminals of the first or second output winding of the resolver and the middle point, and a second output voltage, between the other one of the opposite end terminals of the output winding and the middle point; and

a comparator circuit for outputting a signal as a fault signal when an output voltage from the difference voltage detection circuit deviates from a reference value.